

AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A sterile female genetically modified mouse which does not undergo menstrual cyclization, wherein the genome of said mouse comprises ~~comprising~~ a mutation, a partial deletion or a total deletion in each allele of endogenous genetic sequence encoding the wild type alpha-fetoprotein (AFP), wherein said mutation, partial deletion or total deletion results in loss of expression of a functional AFP in both alleles.

2. **(Canceled)**

3. **(Canceled)**

4. **(Previously presented)** The sterile female genetically modified mouse of claim 1, wherein said sterile female genetically modified mouse is homozygous for a mutation, a partial deletion or a total deletion in endogenous genetic sequence encoding a functional alpha-fetoprotein (AFP).

5. **(Canceled)**

6. **(Previously presented)** The sterile female genetically modified mouse of claim 4, wherein said sterile female genetically modified mouse does not undergo a complete reproductive cycle.

7. **(Previously presented)** The sterile female genetically modified mouse of claim 4, wherein said sterile female genetically modified mouse does not allow an uteral nidification of an embryo.

8. **(Cancelled)**

9. **(Withdrawn)** A pluripotential embryonic stem cell comprising a partial or a total deletion of a genetic sequence encoding a mammal alpha-fetoprotein (AFP).

10. **(Currently amended)** A method for identifying an agent for use in ~~preventing osteoporosis, increasing fertility, or preventing conception~~ comprising:

obtaining a sterile female genetically modified mouse which does not undergo menstrual cyclization, wherein the genome of said mouse comprises ~~comprising~~ a mutation, a partial deletion or a total deletion in each allele of endogenous genetic sequence encoding the wild type alpha-fetoprotein (AFP), wherein said mutation, partial deletion or total deletion results in loss of expression of functional AFP in both alleles;

contacting said sterile female genetically modified mouse with said agent; and

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determining the effects of said agent on ~~osteoporosis, fertility or contraception~~ in said sterile female genetically modified mouse.

11. **(Withdrawn)** A method for identifying a molecule that is able to bind to alpha-fetoprotein or a portion thereof comprising contacting said alpha-fetoprotein or portion thereof with a molecule and measuring binding of said molecule to said alpha-fetoprotein or portion thereof.

12. **(Withdrawn)** A composition comprising alpha-fetoprotein or a portion thereof fixed to a solid surface.

13. **(Withdrawn)** The embryonic stem cell of claim 9, wherein said stem cell is a mouse cell.

14.-18. **(Cancelled)**